tennessee DESIGN lines

THE TENNESSEE BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS

Tennessee Department of Commerce and Insurance Spring/Summer 2005

In This Issue:

Important Notice Regarding Renewals

As reported in the Spring/Summer 2004 issue of *Tennessee Design Lines*, registration renewal fees must be received by the registration expiration date in order to avoid incurring a late penalty fee ($10 for each month or fraction of a month which elapses before payment is tendered). Since the Board is required to assess penalties based on the date of receipt and deposit (not the postmark date), all registrants are advised to submit their renewal form and fee well before the registration expiration date in order to avoid incurring late fees. Renewal notices are mailed 2 ½ months in advance of the registration expiration date to give all registrants ample time to renew. Registrants are also reminded to complete the reverse side of the renewal form to avoid delays in the renewal process.

REVISED STANDARD OF CARE FOR FIRE SPRINKLER SYSTEM DESIGN

The following revised Standard of Care was adopted by the Board on January 20, 2005, and will take effect on **January 1, 2006**. Prior to this effective date, registrants may either continue to use the previous Standard of Care that was effective on April 1, 2003, or they may adopt the revised Standard of Care. After December 31, 2005, all registrants will be expected to conform to the new standard.

COMMENTARY

This standard of care is intended to be utilized only by engineers for the design of fire sprinkler systems. The standard is not intended for use by others as a code compliance checklist or to replace existing regulatory agency checklists. This standard was developed to assist in design and preparation of contract documents for fire sprinkler systems. This commentary and associated standard is the Board's policy regarding the responsibilities and interactions of an engineer with the design and construction team.

The Standard of Care for Fire Sprinkler Systems Design complements NFPA 13, Chapter 14, Appendix "A" (A-14.1 Preliminary Plans, 2002 edition), and should be interpreted only as a minimum standard of design. Just as the National Fire Protection Association standards are a minimum requirement, so is the Standard of Care for engineers. The engineer is required to evaluate local job conditions for the fire sprinkler system design and coordinate with authorities having jurisdiction (AHJ).

The Design Concept in the Standard of Care refers to those inputs and calculations initially done by the engineer to develop the conceptual ideas and limitations of the system (i.e. the density, water flow, and pressure requirements; classification of the commodities to be protected; and confirmation of the hydraulic data and preliminary hydraulic design). Initial design calculations will be included in the Design Concept. In a building with several different occupancies and fire loadings, only the area of highest demand needs to be calculated.

The engineer shall establish a margin of safety between the available water pressure and the required demand pressure. When sizing pipe using the initial design calculations, the engineer should leave more safety margin than the contractor. The difference is that the contractor's calculations will enumerate the various fittings and offsets that may not be delineated in the engineer's preliminary design.

A substantial deviation, such as a contractor's proposal for a major design change, should be recalculated and redrawn by the contractor's own Responsible Managing Employee (RME). The RME will certify his changes and submit for approval. If a competent sprinkler contractor submits

cont. page 3

News From The State Fire Marshal's Office

Major Changes in the Tennessee Public Buildings Accessibility Act

By Randal Delbridge, FCS-III, SFMO

The 104th General Assembly revised the Tennessee Public Buildings Accessibility Act ("Act"). The most substantive change affects the codes and guidelines applicable to buildings and structures covered under the Act. Until July 1, 2006, the current codes still apply. Currently the only codes usable for buildings and structures covered by the Act are either the North Carolina State Building Code, Volume 1-C – Accessibility, 1991 with 1996 revisions (NCAC) or the CABO/ANSI A117.1 1992 edition. An important issue to make note of is that no other versions of ANSI A117.1 or NCAC are recognized by the Act and therefore cannot be used as an accessibility code in Tennessee for any building or structure covered under the Act.

Beginning July 1, 2006, all buildings covered by the Act which are constructed, enlarged, or substantially altered or repaired must be designed to one of the following: a) The 2002 North Carolina Accessibility Code with 2004 Amendments, b) currently enforced American with Disabilities Act Accessibility Guidelines (ADAAG) or the Uniform Federal Accessibility Standards (UFAS) (whichever is applicable). The statute was revised with intent to keep Tennessee's accessibility standards in line with the standards the United States Department of Justice (USDoJ) currently enforces. TCA §68-120-204 will not permit the use of any other edition of ADAAG or UFAS not codified by the USDoJ or accessibility code other than the NCAC for any building or structure requiring review by the Tennessee State Fire Marshal's Office (SFMO).

An important item of interest is that the 2002 NCAC with 2004 Amendments has been preliminarily certified by the USDoJ as meeting or exceeding the requirements of Title-III of the ADA. The final step in the certification process prior to formal announcement was a public hearing in Washington DC on June 20, 2005, where not one dissenting comment was recorded. Formal certification may have been already granted, but due to printing deadlines we cannot confirm that it is fully certified at this time. We do suggest that designers investigate the ADA's home page at http://www.ada.gov for the latest developments. To this date, the USDoJ

cont. page 8

NEW RULES TAKE EFFECT

At its September 16, 2004, rulemaking hearing, the Board approved several rule changes, which took effect on May 28, 2005. The following is a summary of those changes:

1. The deadline for receipt of applications from candidates who must be examined prior to registration as a landscape architect will be determined annually by the Board [Rule 0120-1-.08(3)].

2. An accredited engineering program is defined as an engineering curriculum of four (4) years or more which is accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET) (or its predecessor) [Rule 0120-1-.10(1)(a)].

3. Provision is made for non-accredited foreign or domestic architecture degrees to be evaluated by the Education Evaluation Services for Architects (EESA) of the National Architectural Accrediting Board (NAAB) to determine if the degrees are substantially equivalent to a NAAB-accredited degree [Rule 0120-1-.11].

4. The language specifying the fees for retaking the entire Landscape Architect Registration Examination (LARE) was deleted because the Board no longer proctors the entire examination [Rule 0120-1-.23(2)].

5. The continuing education requirement for registrants seeking biennial renewal of active registration for the first time after initial registration was lowered from twenty-four (24) Professional Development Hours (PDH's) to twelve (12) PDH's earned during the two (2) years immediately following initial registration and immediately preceding application for renewal. At least seven (7) of the PDH's claimed must address health, safety and welfare issues and technical competency. Registrants seeking biennial renewal of active registration for each two (2)-year period thereafter must complete twenty-four (24) PDH's during the two (2) years immediately preceding application for renewal (carryover hours, not exceeding twelve (12) hours, from the preceding renewal period may be included), with at least thirteen (13) of the PDH's claimed addressing health, safety and welfare issues and technical competency [Rule 0120-5-.04].

The revised rules are posted on the Board's website. ■

Revised Standard…*cont.*

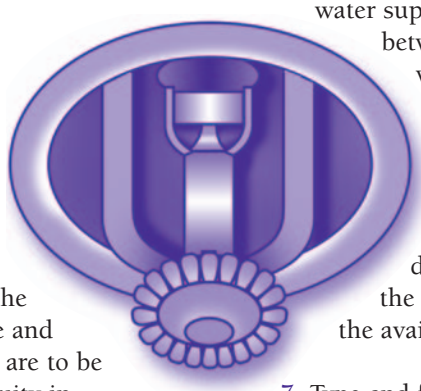
a reasonable proposal for change, and if the contractor's drawings and calculations meet all the requirements of the engineer's design, and there is not a valid reason why the engineer has used a different layout configuration, the engineer should accept the contractor's drawings and calculations.

Field changes may not require recalculation by the engineer. Deviations in the field such as offsets around ductwork should be anticipated. Initial design calculations by the engineer containing a reasonable, practical pressure safety margin should cover these. Substantial deviations could require the contractor to prove his calculations are still adequate to provide the protection stipulated in the design documents.

The shop drawings and calculations should be submitted to the engineer of record prior to transmittal to the reviewing authorities for documentation and approval. The engineer of record will document his review of the shop drawings and calculations, using a review stamp. This is an engineer's acceptance, acceptance as noted, rejection, or revise and resubmit, etc. of the shop drawings. This is based on review of the shop drawings against the design concept identified in the preliminary plans. The engineer should never place his P. E. seal on the sprinkler contractor's drawings or calculations unless he actually prepared them or supervised their preparation. The reviewing authorities may accept the sprinkler contractor's drawings and calculations even if different from the preliminary design submitted by the engineer, as long as they have been approved by the engineer of record.

The water supply information and flow testing addressed in the Standard of Care requires a flow test less than six months old. The engineer should supervise the performance of the flow test and/or will verify the accuracy of the test during preliminary design.

The engineer's drawings should clearly indicate the point that the licensed plumbing or site utilities contractor's work stops and the licensed fire sprinkler contractor's work begins. Note that the fire service piping is required to be installed and certified by a licensed fire sprinkler contractor. The point of service is defined in state law, including but not limited to, Tennessee Code Annotated, Title 62, Chapter 32 (Fire Sprinkler Contractors) and Rules Chapter 0780-2-7 -.01 (Definitions) of the Department of Commerce and Insurance. The drawings are to be prepared to assure continuity in materials and performance in accordance with the various codes, especially National Fire Protection Association, Standards 13 and 24.



STANDARD OF CARE

The Design Concept (Bid Package)

I. The Engineer develops the conceptual ideas and limitations of the system. Plans shall be drawn to an indicated scale, on sheets of uniform size, with a plan of each floor, and shall show those items from the following lists that pertain to the design of the system:

1. Size and location of all risers, mains, and branch lines as required to provide preliminary hydraulic calculations (See Commentary and Section III).

2. Size, type (i.e. wet, dry, deluge, pre-action, etc.), and location of risers and standpipes with description and arrangement of valving and accessories, including location of any and all hose valves, alarms and signal devices. Include area protected by each riser, each system, and each floor.

3. The location and size of the hydraulically most remote area.

4. A description of Occupancy and Commodity classifications.

5. Preliminary hydraulic calculation results including, required design density, area of application, required hose stream, and required duration.

6. Clear statement on the required water supply margin of safety between the required water supply (including hose-streams) and the available supply. A suggested safety margin is a 5% difference between the system demand and the available water supply.

7. Type and finish of sprinkler heads in finished areas. Verify if specific sprinkler head location parameters exist.

8. Clear statement on any required seismic bracing. A statement to the effect of, "Install seismic bracing per NFPA 13" is not acceptable as NFPA 13 describes only how to install bracing.

9. Fire pump (if required) room layout, fire pump and controller specification, and transfer switch.

10. Standpipe design (if required) must be clearly delineated on the drawings.

11. A completed Owner's certificate. See NFPA 13, 2002 edition, Figure A.14.1(b) Owner's Information Certificate.

It is understood that, for many projects, a total design package prepared by a design team of various disciplines will be completed. These design documents may consist of multi-disciplinary drawings and specifications, and shall show:

12. Name of owner and occupant.

13. Location, including street address.

cont. page 5

Disciplinary Action Taken By The Board

FORMAL ACTIONS:

William G. Adair, Jr., R.A. #19896
Rockwall, Texas

VIOLATION: Misconduct in the practice of architecture; affixed seal to plans not prepared by him or under his responsible charge. Tenn. Code Ann. §§62-2-306 and 62-2-308(a)(1)(B), and Rules 0120-2-.08 and 0120-2-.07.

PENALTY: 6-month suspension; $1,000 civil penalty; take and pass the Board's law and rules exam.

FINAL ORDER: July 21, 2005

Robert P. Beall, P.E. #15126
Nashville, Tennessee

VIOLATION: Affixed seal to plans not prepared by him or under his responsible charge (had no direct contact with client). Rule 0120-2-.08.

PENALTY: Reprimand; $3,000 civil penalty; take and pass the Board's law and rules exam.

FINAL ORDER: January 20, 2005

Alvah Paul Breitweiser, R.A. #14969
Fort Myers, Florida

VIOLATION: Misconduct in the practice of architecture; suspension of registration in another jurisdiction. Tenn. Code Ann. §62-2-308(a)(1)(F) and Rule 0120-2-.07(5)(b).

PENALTY: 6-month suspension; 5-year probation; take and pass the Board's law and rules exam.

FINAL ORDER: January 20, 2005

Nathan B. Carter, Jr., P.E. #15606
Meridian, Mississippi

VIOLATION: Misconduct in the practice of engineering; affixed seal to plans not prepared by him or under his responsible charge. Tenn. Code Ann. §§62-2-306, 62-2-308(a)(1)(B), and 62-2-601(b), and Rules 0120-2-.08, 0120-2-.03, 0120-2-.07, and 0120-2-.02.

PENALTY: 18-month suspension; take and pass the Board's law and rules exam.

FINAL ORDER: January 20, 2005

Ferraro & Choi Associates
Honolulu, Hawaii

VIOLATION: Unlicensed practice of architecture and engineering. Tenn. Code Ann. §§62-2-101 and 62-2-105.

PENALTY: $2,000 civil penalty.

FINAL ORDER: July 21, 2005

Perry W. Hibbard, R.A. #23106
Lexington, Kentucky

VIOLATION: Misconduct in the practice of architecture; practice outside areas of competency. Tenn. Code Ann. §62-2-308(a)(1)(B) and Rule 0120-2-.03.

PENALTY: Caution; $1,000 civil penalty.

FINAL ORDER: January 20, 2005

Eric W. Lee, R.A. #102440
Chattanooga, Tennessee

VIOLATION: Practiced architecture on an expired certificate of registration. Tenn. Code Ann. §§62-2-101 and 62-2-105.

PENALTY: $250 civil penalty.

FINAL ORDER: January 20, 2005

James P. McGirl, P.E. #21591, Expired
Soddy Daisy, Tennessee

VIOLATION: Practiced engineering on an expired certificate of registration. Tenn. Code Ann. §§62-2-101 and 62-2-105.

PENALTY: $500 civil penalty.

FINAL ORDER: July 21, 2005

John L. Miller, III, P.E. #15207, Expired
Knoxville, Tennessee

VIOLATION: Practiced engineering on an expired certificate of registration. Tenn. Code Ann. §§62-2-101 and 62-2-105.

PENALTY: $250 civil penalty.

FINAL ORDER: July 21, 2005

Donald M. Stansell, R.A. #102880
Montgomery, Alabama

VIOLATION: Misconduct in the practice of architecture; revocation of registration in another jurisdiction. Tenn. Code Ann. §62-2-308(a)(1)(F) and Rule 0120-2-.07(5)(b).

PENALTY: Revocation of certificate of registration.

FINAL ORDER: July 21, 2005

Barry Wigington, Nonregistrant
Atlanta, Georgia

VIOLATION: Unlicensed practice of architecture. Tenn. Code Ann. §§62-2-101 and 62-2-105.

PENALTY: $1,000 civil penalty.

FINAL ORDER: May 19, 2005

The Board and Staff wish to extend our sympathies to the families and friends of these individuals who have honored their professions:

ARCHITECTS

Bihm, N. Michael, Jr.,	#7268
King, David P.,	#11760
Miller, Joe A.,	#11111
Odom, Ben J.,	#3286
Shelton, Bill,	#5363

ENGINEERS

Bryant, Edgar H.,	#6802
Croes, John A.,	#1448
Deverell, James L.,	#8497
Dicker, Paul E.,	#2966
Fleming, Larry A.,	#11862
Ham, James H., Jr.,	#22834
Hawk, Terry S.,	#20875
Hiles, Clebert M.,	#6417
Kalb, George F., Jr.,	#8759
LeFevere, Claude L., Jr.,	#3168
Litton, Stephen M.,	#2509
Lyne, James A., Jr.,	#3277
McAmis, John C., Jr.,	#1578
McCrackin, Daniel W.,	#22663
Montgomery, Vernon,	#106682
Pandolph, James E.,	#15464
Payne, Gilbert Lynn,	#101443
Perkins, Alan R.,	#13769
Renfro, Dan W.,	#9466
Schmidt, Harold J.,	#11972
Scott, Robert A.,	#6574
Senatore, Samuel J.,	#7185
Wynn, Robert H.,	#7575

REGISTERED INTERIOR DESIGNERS

Thompson, Cheryl F.,	#245

If you have a name that should be recognized in this section, please contact the Board office. ■

Revised Standard...*cont.*

14. North arrow.

15. Construction type, building height in feet, building area, and occupancy of each building.

16. Full height cross section, or schematic diagram, including structural member information if required for clarity and including ceiling construction and method of protection for nonmetallic piping.

17. Building features such as combustible concealed spaces, floor openings, window openings, areas subject to freezing, and areas from which it is intended to omit sprinkler protection.

18. Location of fire barriers and their fire resistance rating.

19. Proposed location and approximate size, if a water supply employing pumps or tanks is contemplated.

20. Name and address of party submitting the preliminary plans.

21. Tentative location of underground major piping, including mains, risers, overhead mains, and fire department connections.

II. Site plans (may be combined with floor plans) contain information pertinent to the proper operation of suppression systems. Information below, with the appropriate details, is required:

1. Size and location of water supplies.

2. Size and location of all piping indicating, where possible, the class and type of new pipe to be installed, and the depth to which it is to be buried.

3. Size, type, and location of valves. Indicate if located in pit or if operation is by post indicator or key wrench through a curb box.

4. Size, type, and location of meters and backflow prevention devices.

5. Size, type, and location of hydrants. Include number and size of outlets. Indicate if hose houses and equipment are to be provided and by whom.

6. Size and location of standpipe risers, hose outlets, monitor nozzles, and related equipment.

7. Location of Fire Department connections; if part of private fire service main system, including detail of connections.

8. Water supply information:
   a. Information regarding whether the main is circulating or dead-end.

   b. Pressures under flowing and static conditions. Information on orifice size and co-efficient of orifice used in the test, and pitot pressure.

   c. Elevations of slabs, floors, ceilings, street main connection, test hydrant, etc.

   d. Information on who conducted the flow test, when, and where the test was conducted. If reliable or current (less than six months old) information is not available, the engineer should supervise the performance of a new flow test and/or will verify the accuracy of a new flow test during preliminary design.

   e. Water supplies and environmental conditions should be evaluated for the existence of microbes and conditions that contribute to Microbiologically Influenced Corrosion (MIC). Where

cont. page 10

Information On Examinations

The Board would appreciate your sharing information about these professional examinations with interns in your office.

ARCHITECTURE

Future information about the ARE and free practice software are available at the National Council of Architectural Registration Boards' (NCARB's) web site: www.ncarb.org.

Exam Results (12/4/04-6/17/05)

	Total	Pass
Bldg. Planning	27	19
Bldg. Technology	23	20
Constr. Doc. & Srvcs	17	14
Gen. Structures	20	14
Lateral Forces	20	14
Mat. & Meth.	22	20
Mech. & Elec.	27	17
Pre-Design	28	23
Site Planning	18	14

ENGINEERING

Beginning in October 2003, the National Council of Examiners for Engineering and Surveying (NCEES) assumed responsibility for administering and proctoring the engineering examinations in Tennessee.

- **Fundamentals of Engineering Examination—**

Application Deadlines:

	Seniors*	Non-seniors**
Spring Exam	February 1	January 1
Fall Exam	September 1	August 1

*Engineering students with senior status in the engineering curriculum.
**Those who have already been awarded an undergraduate degree in engineering.

The FE exam is currently administered in Chattanooga, Cookeville, Franklin, Knoxville, Martin, and Memphis on:

October 29, 2005
April 22, 2006

- **Principles and Practice of Engineering Examinations—**

The application deadline for new applicants for the spring Principles and Practice of Engineering (P&P) exam is December 1. The fall deadline is June 15. Exam applicants must have the required years of experience prior to filing the application. New exam applicants must submit all required supporting documentation by January 1 for the spring exam and by July 15 for the fall exam to ensure that their applications are processed prior to the exam-scheduling deadline. The exam will be given in Franklin, Knoxville, and Memphis on:

October 28, 2005
April 21, 2006

To facilitate scheduling of the P&P exams, retake requests and fees should be received by the board office by February 1 for the spring exam and September 1 for the fall exam. Registrants wishing to take other exam disciplines must submit a written request to the Board with the exam fee by the above deadlines. The examination fee is currently $130, and the retake fee is $205. Those wishing to take the Structural II exam must already be registered either by taking the Civil or Structural I exams as the basis for registration and must submit a Structural II application form (available at the Board's website) with the $475 Structural II exam fee.

Study Materials Available from NCEES

The NCEES has study material for the Fundamentals of Engineering, Principles and Practice of Engineering, Structural I and II examinations. Available materials include the FE reference handbook, sample questions and solutions, and practice problems (on CD-ROM). Study materials may be ordered from the NCEES website (www.ncees.org).

Changes to Calculator Policy

At its 2004 annual meeting, NCEES voted to revise the examination policy concerning materials permitted in the examination room so that only models of calculators specified by NCEES are allowed. The following models are the only calculators that will be permitted in the examination room for the April and October 2005 exam administrations: Hewlett Packard—HP 33s and HP 9s; Casio—115 MS and 115 MS Plus; Texas Instruments—TI 30X IIS, TI 30X IIB, and TI 36X. This change is intended to reduce confusion among candidates and proctors. Each year, an NCEES subcommittee on calculators will review and revise the approved calculator list. For more information, please see the Calculator Policy at www.ncees.org or call NCEES at 864-654-6824.

Exam Specification Changes

The Transportation Design Standards of the Civil PE exam, the Depth Modules for the Electrical and Computer PE exam, the Industrial PE exam, and the Fundamentals of Engineering (FE) exam will all be under revised specifications effective with the October 2005 administration. All new specifications are posted on the NCEES website. A new Reference Handbook (Seventh Edition) is available to support the new specifications for the FE exam.

Exam Results (4/05)

	Total	Pass
FE	434	301
PE	170	87

LANDSCAPE ARCHITECTURE

The multiple-choice sections of the Landscape Architect Registration Examination (LARE)—Sections A, B and D--are now computerized and are administered separately from the graphic portions of the examination by the Council of Landscape Architectural Registration Boards (CLARB). In order to take the multiple-choice sections of

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Examinations...*cont.*

the examination, exam candidates must register directly with CLARB at www.clarb.org. Tennessee candidates are required to indicate that they have been approved to sit for the examination by the Tennessee Board when registering for the examination. Candidates may take the examination at any of the approved CLARB testing centers, and examination fees (scoring and administration fees) are paid at the testing center. Additional information regarding the computerized sections, including current fees and exam dates, is available at CLARB's website.
The graphic portions of the examination—Sections C and E--will continue to be administered in Nashville, Tennessee by the Tennessee Board with examination fees paid directly to the Tennessee Board.

Listed below are upcoming dates related to the administration of graphic portions of the LARE:

December 5, 2005	Section C
December 6, 2005	Section E

The application deadline for new applicants is currently January 15, but is subject to change.

The exam fees for the graphic portions are as follows:

December 2005

Section C	$245
Section E	$245

Exam Results (12/04)

	Total	Pass
Section C	5	3
Section E	5	0

INTERIOR DESIGN

The Interior Design Qualification exam will be given on:

October 14-15, 2005
April 7-8, 2006

To obtain an application for the exam, call the National Council for Interior Design Qualification (NCIDQ) at 202-721-0220, or visit www.ncidq.org. The application deadline for the spring exam is December 1; the deadline for the fall exam is June 1.

Exam Results (4/05)

	Total	Pass
Section 1	22	16
Section 2	26	17
Section 3	19	16

NEW REGISTRANTS

The Board and staff congratulate the following registrants who passed their respective professional examinations and were registered between July 1, 2004, and December 31, 2004:

ARCHITECTS
(Architect Registration Exam)

Paul Charles Anastasio
John Joseph Barker
Paul Benjamin Bass, Jr.
Gary Allen Beal
Michael Thomas Blanchard
Kevin Andrew Caudle
Nicholas Emmett Dryden
Jerry L. Hartsfield
Lisa Ann Hoskins
Paul R Jobe
Steven Wade Landwehr
Timothy Madison Morgan
Travis Ray Pigott
John Lynch Sanders
Kimberly Diane Thoma
Michael John Thoma
Scott James Vanderjagt

ENGINEERS
(Principles and Practice of Engineering Examinations)

Jason David Baker
Walter Glenn Coffman
Mason E. Favazza
Philip Gregory Garrett
Brent Wesley Griggs
Mark Patton Guess
Mark Edward Hibbs
Jeremy Nathaniel Hitchcock
Thais Anissa Howard
Melinda Dawn Johnisee
Ryan Evin Lovelace
Steve Peter Mishu
Jason Darrell Moody
Robert Jonathan Mosteller
Kevin Duane Ogles
Anthony Leverne Pelham
Lawrence Edward Perry, III
Geoffrey Ryan Pratt
Russell Nolan Rackley
Brian Michael Reynolds
John Mark Roberts
Christian Chandler Schramm
Joel Thomas Skelley
J. Andrew Smith
Jared Brandon Smith
Richard Hayes Sullivan
Barry Eugene Tuller
John Horace Wonderly

LANDSCAPE ARCHITECTS
(Landscape Architect Registration Exam)

Roger Gene Baker
Brian Scott Hudson
John Paul Lavender

REGISTERED INTERIOR DESIGNERS
(National Council for Interior Design Qualification Exam)

David Lawrence Crain
Laura Elizabeth Duncan
Jillian Burger Hanggi
Kelle Ann Horne
Heather Lee Lotter
Christie Marie McCullough
Latoya S. Nelson
Angela Noel Prichard
Peggy B. Violette ■

FREQUENTLY ASKED QUESTIONS

May a building official require a structure to be designed by an architect or engineer, although exempt under the registration law, if it is deemed that such a structure is an undue risk to public safety, health, or welfare?

Yes. The building official may require part or all of the structure to be designed by an architect or engineer. The Board and registration law do not supersede the building official's authority to protect the health, safety, or welfare of the public. Per T.C.A. §62-2-102(c), nothing shall prevent any awarding authority, public or private, from requiring the services of a registered architect, engineer or landscape architect for any project.

I will be renewing my registration after the expiration date because I am completing my continuing education during the six-month grace period. Can I still practice during the grace period?

No. If you are using the six-month grace period to complete the required continuing education hours, you cannot practice or offer to practice your profession during this period. Your license is expired and will not be renewed until the education requirement is met. The grace period begins the day after the expiration date of the license. Registrants not renewing within six months of the registration expiration date must reapply for registration.

May the seal used by the registrant on construction documents be computer generated?

Yes. The Board has determined that the seal may be an embossed, rubber, self-adhesive, or electronic seal. The registrant must personally sign or affix his or her signature and date of signature, either manually or electronically, using a secure method. ■

Fire Marshal News...*cont.*

has never failed to formally certify any code which has received preliminary certification.

If the USDoJ approves the July 23, 2004 Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines (ADA-ABAG) recently released by the Access Board, then it may automatically be used when designing a covered building or structure throughout Tennessee. The revision to the Act will allow some Tennessee jurisdictions to adopt the uncodified ADA-ABAG or just about anything else they desire; however, the SFMO urges caution as some standards, such as the 1998 and 2003 ICC/ANSI A117.1, have known conflicts with Title III of the ADA.

Many registrants quietly wrestle with the currently enforced ADAAG and UFAS and in some ways the ADA itself, because of the word "reasonable," which tends to place the onus on the designer. When the NCAC is fully certified by the USDoJ as meeting or exceeding ADA Title-III requirements, designers will have an established, illustrated, prescriptive code available to them under the Act. Certification of a code has other benefits as well; *"At any enforcement proceeding under title III of the Act, such certification shall be rebuttable evidence that such State law or local ordinance does meet the minimum requirements of title III."* [28 CFR Part 36 602 General rule]

The SFMO anticipates most projects submitted will be designed to the new NCAC rather than the currently enforced ADAAG or UFAS largely due to a) scoping issues associated with the guidelines and b) the historical preference for the existing NCHC and USDoJ certification of the NCAC. To this end the SFMO, in cooperation with Vaughn and Melton with the assistance of the A&E Board, together are currently working on developing a week-long class specifically on the USDoJ certified NCAC sometime prior to July 1, 2006. The seminar will be held in the Nashville area and will feature an individual instrumental in NCAC's certification. Copies of the NCAC may be obtained from the North Carolina Department of Insurance, Office of the State Fire Marshal, which can be contacted through http://www.ncbuildingcodes.com/. Designers may also want to go to http://www.huduser.org/publications/destech/fairhousing.html to obtain a currently applicable Fair Housing Act Design Manual prior to the seminar. Questions regarding these changes should be directed to the SFMO, Codes Enforcement Section, at 615-741-7190.

Tennessee Modular Building Act

Recently the State Fire Marshal's Office has had an increased number of pre-fabricated (modular) buildings and components being specified in various types of projects under review by the Codes Enforcement Section. These types of structures are regulated and must comply with the Tennessee Modular Building Act (T.C.A. §68-126-301 et seq.) and all rules (Chapter 0780-2-13) promulgated thereunder.

Tennessee Modular Building Program Features

The Tennessee Modular Building Act was established in 1985 with the purpose of establishing building construction standards for factory-built structures. The program includes, in addition to housing, all business and commercial buildings that are mass-produced in factories and then transported to building sites to be installed. Manufactured (mobile) homes are excluded from the program. Their regulation is the responsibility of the U.S. Department of Housing and Urban Development (HUD).

The Tennessee Modular Building Act does not impact buildings constructed in the conventional manner. Such buildings, which account for the vast majority of new construction in the State of Tennessee, are regulated

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Fire Marshal News...*cont.*

through construction codes adopted by the state and enforced by state and local governments. It should be noted also that the Tennessee Modular Building Act does not supersede zoning regulations administered by local governments.

Benefits of the Tennessee Modular Building Program

The program covers buildings and/or components that are of "open" and/or "closed" construction, meaning that these buildings and/or components cannot be inspected at the installation site without disassembly, damage or destruction.

Regulating the construction of mass-produced modular buildings to ensure their safety and soundness presents problems beyond the normal scope of local building inspection regulation. Local regulation programs are generally designed to cover only structures that are conventionally built (piece-by-piece) at the construction site.

Modular Building Manufacturers also face unique problems. There is simply no satisfactory way for these manufacturers to have buildings inspected by every local building code enforcement authority that receives these buildings in its jurisdiction. The number of code interpretations and the cost of inspector transportation would preclude a viable factory inspection program by each local government. The Tennessee Modular Building Act provides a mechanism whereby local building inspection departments can be assured that quality buildings are being installed in their jurisdiction. It also provides a cost-effective mechanism whereby manufacturers can have their buildings inspected during the manufacturing process.

How the Tennessee Modular Building Program Operates

The Tennessee Modular Building program operates in accordance with rules that have been adopted by the Commissioner of the Tennessee Department of Commerce and Insurance under authority granted by the Tennessee Modular Building Act. Modular manufacturers are required to obtain independent third party approval and a "Letter of Receipt and Filing" from the State of Tennessee for their manufacturing systems, model plans, and quality control procedures prior to any construction. Independent third party field inspections of these approved and filed manufacturing systems, model plans, and quality control procedures, along with inspection of modular buildings during manufacturing, are accomplished by the department through an inspection system that utilizes independent third party design review and construction inspection agencies.

All independent third parties approved and state filed modular buildings must be manufactured to meet the codes listed in the rules promulgated under the Tennessee Modular Building Act. (i.e., 2003 IBC, 2003 IMC, 2003 IPC, etc.) Such buildings will have a department insignia (Green Label) indicating their compliance with the state's construction standards. An independent third party approved and state filed building is deemed to comply with all local ordinances and laws relating to its construction.

Local governments retain control over all matters relating to a building's installation at a site, including subdivision controls, zoning, grading, foundation installations and utility hook-ups.

Failure to comply with the Tennessee Modular Building Act and all rules promulgated thereunder, will result in a delay of project approval and the possible removal of illegally manufactured, sold, and installed modular units.

Tennessee Modular Building Program Administration

The Commissioner of the Tennessee Department of Commerce and Insurance (State Fire Marshal) has the overall responsibility for the administration and enforcement of the Tennessee Modular Building Act. The Commissioner of Commerce and Insurance has assigned the day-to-day administration of the program to the State Fire Marshal's Office under the Division of Fire Prevention. For more detailed information on the Tennessee Modular Building Act, please visit our website at: http://www.state.tn.us/commerce/sfm/modular/index.html

Or contact:
Mr. Mike Bartlett, FCS III

cont. next page

DID YOU KNOW?

The National Council for Interior Design Qualification (NCIDQ) recently completed a new continuing education monograph entitled "ADA Guidelines: Past, Present and Future." This is the third title in NCIDQ's continuing monograph series. Other titles in this series include "Ethics and the Design Professions" and "Lighting to Protect." For more information, contact NCIDQ at 202-721-0220, or visit www.ncidq.org.

The Tennessee Board now has continuing education reciprocity agreements in place with the Alabama Board for Registration of Architects, the Arkansas State Board of Architects, and the Mississippi State Board of Architecture. If an architect is registered and resides in one of these jurisdictions and has met the continuing education requirements of that state, he/she may state such on the renewal of registration form. If an architect from one of these jurisdictions is selected for audit, he/she may submit a copy of his/her wallet card or license from the resident state in lieu of submitting the summary log and attendance verification records. ■

Revised Standard...*cont.*

conditions are found that contribute to MIC, the Owner(s) will be notified.

III. Preliminary hydraulic calculations.

1. The Engineer shall prepare and submit preliminary hydraulic calculations proving availability of adequate water, (volume, duration, and pressure) for protection of the area of greatest demand.

IV. Specifications

1. Specifications shall be prepared for fire protection the same as for any other portion of the project.

V. Engineer's Seal

1. The engineer of record submitting fire protection system design construction documents shall seal, sign, and date each page or sheet of drawings and the first page of specifications and calculations.

VI. Legend

1. The engineer's drawings should clearly indicate the point that the licensed plumbing or site utilities contractor's work stops and the licensed fire sprinkler contractor's work begins. Note that the fire service piping is required to be installed and certified by a licensed fire sprinkler contractor. The point of service is defined in state law, including but not limited to, Tennessee Code Annotated, Title 62, Chapter 32 (Fire Sprinkler Contractors) and Rules Chapter 0780-2-7-.01 (Definitions) of the Department of Commerce and Insurance. ■

Fire Marshal News...*cont.*

STATE OF TENNESSEE
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STATE FIRE MARSHAL'S OFFICE
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Department of Commerce and Insurance, Authorization No. 335192, 7,500 copies, July 2005. This public document was promulgated at a cost of 45¢ per copy.

Tennessee Board of Architectural and Engineering Examiners Address Change Form

It's the rule ... if you move, you need to give the Board your new mailing address within 30 days (Rule 0120-1-.27). We would also appreciate knowing when you change employers. This is your personal responsibility and not your employer's. We know you want to receive your license renewal notices, newsletters, and other important communications promptly. If you have a change to report, please complete and return this form to the **Board of Architectural and Engineering Examiners, 500 James Robertson Parkway, 3rd Floor, Nashville, TN 37243-1142**. You may also submit address changes by e-mail; send them to Frances Smith at <frances.p.smith@state.tn.us>.

Please do NOT submit a change of address with payment of the professional privilege tax; the Department of Revenue does not forward these to the Board.

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